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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------|----------------------|---------------------|------------------|
| 10/056,555 | 01/25/2002 | Hidekazu Baba | FUJA 19.379 | 8863 |
| 26304 | 7590 | 11/29/2005 | EXAMINER | |
| KATTEN MUCHIN ROSENMAN LLP | | | YANG, LINA | |
| 575 MADISON AVENUE | | | ART UNIT | |
| NEW YORK, NY 10022-2585 | | | PAPER NUMBER | |
| | | | 2665 | |

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/056,555 | Applicant(s) BABA, HIDEKAZU | |
| | Examiner Lina Yang | Art Unit 2665 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 11-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/25/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/25/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 3, 4 and 16 are rejected under 35 U.S.C. 112, second paragraph.

Claim 3 recites the limitation "the bandwidth determination managing apparatus" in line 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claims 4 and 16 are rejected as the same reason as for claim 3.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the preset bandwidth value", there are two preset bandwidth values, i.e. "the first preset bandwidth value" and "the second preset bandwidth value". It's not clear which "preset bandwidth value", the claim is referring to.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wacławsky (U. S. Patent No. 6,449,255 B1).

Regarding claim 1, Wacławsky teaches a data repeater equipment having a bandwidth control function comprising ("data communication device" 10 in fig. 1; the "data communication device" can be a router or repeater; col. 1 lines 17-19):

traffic amount holding means that holds a traffic amount measured at every short-term period (memory 22, traffic monitor 26 and traffic analyzer 32-IS in fig. 1); and

bandwidth adjusting means (management modules 16, 18 and 20 in fig. 1) that calculates an average traffic amount at every long-term period based on the traffic amount held in the traffic amount holding means (traffic analyzer 32-IS of the management module in fig. 1 does the calculation; col. 8 lines 48-67 and col. 9 lines 1-15; step 78 in fig. 4 and corresponding explanations; for example col. 10 lines 58-67 and col. 11 lines 1-5; fig. 5), compares a bandwidth value corresponding to the calculated average traffic amount with a first preset bandwidth value, thereby to obtain a difference between the two, and re-sets the first bandwidth value to a second preset bandwidth value that minimizes this difference (steps 80 and 82 in fig. 4 and corresponding explanations for example, col. 11 lines 6-21).

Regarding claim 5, Wacławsky further teaches that the data repeater equipment further comprising a repeater processing unit that performs at least the repeat

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processing of a packet to be handled and a bandwidth control function, whereby the bandwidth adjusting means executes the bandwidth control to be applied to the repeater processing unit (performed by element 16, 18, 20 and 24 in fig. 1).

Regarding claim 6, Wacławsky further teaches that the traffic amount holding means includes a traffic amount counter, and the traffic amount counter measures the number of the packets handled by the repeater processing unit (counters 46 and 48 in fig. 2).

Regarding claim 7, Wacławsky further teaches that the data repeater equipment further comprising a bandwidth determination unit that holds the preset bandwidth value, whereby the bandwidth determination unit inputs the preset bandwidth value to the bandwidth adjusting means and the repeater processing unit (traffic analyzer 32-IS in fig. 1).

Regarding claim 8, Wacławsky further teaches that the traffic amount holding means divides the number of packets handled during the short-term period by the time corresponding to this period, and uses an obtained short-term average value as the traffic amount to be held (traffic analyzer performs the calculation; col. 8 lines 67 and col. 9 lines 1-15).

Regarding claim 9, Wacławsky further teaches that the bandwidth adjusting means calculates the long-term average traffic amount using a predetermined algorithm (col. 3 lines 52-60).

Regarding claim 10, Wacławsky further teaches that the data repeater equipment executes the predetermined algorithm based on a predetermined program, with the predetermined program replaceable with any optional one of a plurality of kinds of programs, without changing the structure of the data repeater equipment (col. 3 lines 52-60).

3. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Adams et al (U. S. Patent No. 5,504,744).

Regarding claim 17, Adams teaches a bandwidth managing apparatus comprising (network management 26 in fig. 2):

reception means (inherent) that receives, by cooperating with a plurality of data repeater equipment (through many element manager 27 in fig. 2), a request for altering a bandwidth setting from any one of the plurality of data repeater equipment (requests from processor 32 in any dynamic bandwidth controller 30 in fig. 2 and fig. 3);

decision means (inherent) that holds a plurality of conditions relating to the bandwidth setting, and decides whether the request satisfies all the conditions or not (col. 8 lines 1-11 and 66-67 and col. 9 lines 1-18) ; and

response means that makes response to the data repeater equipment to permit the request when the request satisfies all the conditions as a result of the decision made, and not permit the request when the request does not satisfy all the conditions (col. 8 lines 1-11 and 66-67 and col. 9 lines 1-18).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waclawsky (U. S. Patent No. 6,449,255 B1) in view of Cox (U. S. Patent No. 6,154,643).

Regarding claim 2, Waclawsky shows the step (step 76 in fig. 4) for making decision of continuing operation with real-time adjustments, but Waclawsky does not

specifically teaches the data repeater equipment further comprising an alteration decision means that decides whether it is possible to permit the alteration of the first preset bandwidth value to the second preset bandwidth value or not, thereby to either permit or inhibit the bandwidth adjusting means to execute the adjustment, based on the decision made. However, it is well known in the art that the alternations of network parameters relies the capability of the system. For example, Cox teaches that an alteration decision means (the controller) that decides whether it is possible to permit the alteration of the first preset bandwidth value to the second preset bandwidth value or not, thereby to either permit or inhibit the bandwidth adjusting means to execute the adjustment, based on the decision made (col. 2 lines 57-60; fig. 3 and corresponding explanations). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include an alteration decision means that decides whether it is possible to permit the alteration of the first preset bandwidth value to the second preset bandwidth value or not, thereby to either permit or inhibit the bandwidth adjusting means to execute the adjustment, based on the decision made, as taught by Cox in the assembly of Wacławsky in order to have system protection.

Regarding claim 15, Cox further teaches that the alteration decision means holds a plurality of predetermined conditions, decides whether the second preset bandwidth value satisfies all the conditions or not, and permits the alteration of the first preset bandwidth value to the second preset bandwidth value only when the second preset bandwidth value satisfies all the conditions (col. 4, lines 52-56 and col. 5 lines 1-7).

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5. Claims 3-4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waclawsky (U. S. Patent No. 6,449,255 B1) in view of Adams et al (U. S. Patent No. 5,504,744).

Regarding claim 3, Waclawsky does not specifically teaches that the data repeater equipment further comprising an interface that cooperates with the bandwidth determination managing apparatus that integrally manages the bandwidths of a plurality of data repeater equipment, via the communication channel. However, Adams from the similar field of endeavor, teaches an interface (element manager 27 in fig. 2) that cooperates with the bandwidth determination managing apparatus (network management 26 in fig. 2) that integrally manages the bandwidths of a plurality of data repeater equipment (elements 21, 28-30 in fig. 2; col. 8 lines 66-67 and col. 9 lines 1-18), via the communication channel (col. 3 lines 7-14). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include an interface that cooperates with the bandwidth determination managing apparatus that integrally manages the bandwidths of a plurality of data repeater equipment, via the communication channel, as taught by Adams in the assembly of Waclawsky in order to provide an interface for different proprietary switches.

Regarding claim 4, Adams further teaches that data repeater equipment further comprising an alteration request means (dynamic bandwidth controller 30 in fig. 2 and fig. 3) that makes a request for permitting the alteration of the first preset bandwidth value to the second preset bandwidth value, whereby the alteration request means

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communicates with the bandwidth determination managing apparatus (network management 26 in fig. 2) to make this request and obtain permission, via the interface, and either permits or inhibits the bandwidth adjusting means to execute the adjustment, according to a decision made by the bandwidth determination managing apparatus (col. 8 lines 1-11) .

Regarding claim 16, Adams further teaches that the bandwidth determination managing apparatus holds a plurality of predetermined conditions, when the bandwidth determination managing apparatus has received a request for altering the setting of the first preset bandwidth value to the second preset bandwidth value from the alteration request means, the bandwidth determination managing apparatus decides whether this second preset bandwidth value satisfies all the conditions or not, and when the second preset bandwidth value satisfies all the conditions, the bandwidth determination managing apparatus permits the alteration request means to alter the first preset bandwidth value to the second preset bandwidth value (col. 8 lines 1-11 and 66-67 and col. 9 lines 1-18).

Allowable Subject Matter

6. Claims 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pruthi et al. (US Patent Application Publication No. 20020105911 A1) teaches an apparatus and a method for collecting and analyzing communication data and using the statistics to dynamically adjusting network routing.

Goguen et al. (US Patent No. 6,665,273 B1) teaches an apparatus and a method for dynamically adjusting MPLS traffic engineering tunnel bandwidth.

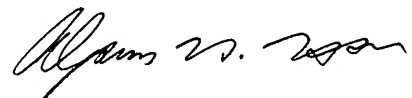
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571)272-3151. The examiner can normally be reached Monday through Wednesday between 7:00 a.m. and 8:00 p.m. eastern standard time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY
11/28/05



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PRIMARY EXAMINER